Large area photo-detector workshop

Argonne National Laboratory - 9700 S. Cass Ave. Lemont, IL 60439 High Energy Physics - Building 362 - room F240 - ph: 630-2526819 contact: Mayly Sanchez (maylysanchez@anl.gov)

9:30 - 10:15 MCP-based photosensors

Henry Frisch

- · Description of the technology
- Application to a water Cerenkov detector
- Status and timeline for development

break 15 min (coffee and bagels)

10:30 - 11:15 Physics in Water Cerenkov based on SuperK

Kate Scholberg

- Dominant backgrounds in water cerenkov detectors
- Separation techniques between neutral pions and electrons
- Vertex Resolution / Reconstruction
- Status/Availability of SuperK simulations and/or reconstruction

11:15 - 12:00 Large Water Cerenkov Detectors / DUSEL

Milind Diwan

- Main physics goals/requirements
- Current options for PMTs in DUSEL: coverage, size, resolution, other
- PMT pressure studies
- Trade-offs of the detector in cost, aspect ratio, pixel size, coverage, resolution
- Status/Plans for DUSEL simulations, available input to simulations

lunch 90 min (restaurant offsite)

1:30 - 3:30 Wish list for the perfect photosensor at DUSEL

discussion

- resolution/granularity
- timing
- coverage
- quantum efficiency
- cost/production speed

3:30 - 4:30 Plans/Tasks to simulate or demonstrate some of the issues

Remote connection information: video using ECS please dial 854863, for connection via phone dial 1-510-883-7860 and then enter the code followed by #. Documents will be found at: http://nwg.phy.bnl.gov/DDRD/cgi-bin/private/DisplayMeeting?conferenceid=26.

Upon arrival you will need to go to the Argonne Visitor's Center where you will receive your visitor's pass. If arriving on Saturday or after hours the pass will be available at the gate house. You will need to show your ID (passport for non US citizens) to get it.

For wireless you will use the ArgonneG-guest network and the first time your browser will be directed to a page where you need to answer a few questions.